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EXAMINER

WEINSTEIN, LEONARD J

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/529,159	Applicant(s) DINKEL ET AL.	
	Examiner LEONARD J. WEINSTEIN	Art Unit 3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16 and 19-30 is/are pending in the application.
- 4a) Of the above claim(s) 1-15, 17 and 18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16 and 19-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the amendment of July 24, 2008. In making the below rejections and/or objections the examiner has considered and addressed each of the applicant's arguments.

2. The examiner acknowledges the amendments to claims 16, 19-26, and 28-29. The examiner notes that claims 17 and 18 have been canceled and claim 30 has been introduced.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 25 rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a cage part having a carrier-side accommodating area that is provided axially spaced from the fastening means, does not reasonably provide enablement for "a carrier side accommodating area of the cage part is provided independently of and spaced from the fastening means." The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to assemble the invention commensurate in scope with these claims.

The limitations as claimed are not commensurate in scope with the specification. As best understood by the examiner the limitation of a "carrier-side accommodating area the cage parts" is directed to element 27 as disclosed. The component is not independent of the fastening means defined by elements 21, 22, 23, 24, 25, 29 and 32.

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Element 27 is the end face of cage part 18 which necessarily comprises one half the fastening means in the instant invention. For the purposes of the action on the merits the limitation of "a carrier side accommodating area of the cage part is provided independently of and spaced from the fastening means" will be considered to be --- a carrier side accommodating area... provided axially spaced from the fastening means -- for proper clarity.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 16, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, and 30 are rejected, each on separate grounds, under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. With respect to claims 16, 19, 22, 23, 24, 25, 26, 27, 28, 29, and 30, the examiner notes that each of the claims is independently deficient of clear and unambiguous language. The examiner has attempted to construe the disclosure and the existing language in the claims to present the applicant with suggestions for how the claims may be amended. The examiner had taken the time to do this because at least one independent claim includes subject matter that would put the claim in condition for allowance once amended. The rejections are as follows:

a. **Claim 16 -**

i. Claim 16 recites the limitation "the cage" in lines 8, 9, and 10.

There is insufficient antecedent basis for this limitation in the claim. As

best understood "the cage" refers to the "multi-piece cage" presented in line 7. Although each recitation of the "the cage" could be considered to be --- the multi-piece cage --- the examiner will consider this limitation to be --- the multi-part cage assembly ---. The difference between piece and part is immaterial, however the examiner suggests the term --- multi-part assembly --- since it is more clear and easily distinguishable from other elements such as "cage parts," "the one cage part," or the "the another cage part."

ii. Claim 16 recites the limitation "the cage parts" in lines 8, 9, and 10. There is insufficient antecedent basis for this limitation in the claim. The recitations of "the cage parts" refer to the "separable cage parts" also presented in line 7. The examiner notes that the frequency with which the term "cage part" is used to refer to different elements of the multi-part cage assembly necessitates that elements be recited consistently and distinctly from other elements that have similar parts or part name and may share some type of engagement with claimed elements that have similar names. Although each recitation of the "the cage parts" could be considered to be --- the separable cage parts --- the examiner will consider initial limitation to be --- a plurality of separate cage parts ---- and --- the plurality of separate cage parts ---.

iii. The recitations of "one cage part" and the "another cage part" are unclear and would confuse one of ordinary skill in the art as to which element the claim was referring to. If not in claim 16 itself, claim 19 sets forth the limitation of "a cage part" and it is not clear which element the claim is referring to.

iv. For the purposes of the office action on the merits the limitations in claim 16 of:

- "a multi-piece cage comprising separable cage parts, the resetting spring the cage parts comprise fastening means that lock the cage and the resetting spring is caged and simultaneously elastically preloaded under the relative displacement of the cage parts said fastening means comprising at least two locking arms formed on one cage part and at least two holes formed on another cage part, each locking arm having a resiliently deformable and unconstrained end configured for engaging a hole of another cage part upon relative displacement of the cage parts"

will be considered to be

- --- a multi-part cage assembly comprising a plurality of separate cage parts, the resetting spring, the plurality of separate cage parts comprise fastening means that lock the multi-part cage assembly and the resetting spring is caged and simultaneously elastically preloaded

under the relative displacement of the plurality of separate cage parts, said fastening means comprising at least two locking arms formed on a first cage part and at least two holes formed on a second cage part, each locking arm having a resiliently deformable and unconstrained end configured for engaging a hole of the second cage part upon relative displacement of the plurality of separate cage parts ---

b. **Claim 19** – as stated above the recitation of "a cage part" is confusing because of the recitations of "one cage part" and "another cage part" in claim 16. As best understood by the examiner the recitation of "a cage" part is referring to the same element that the examiner as interpreted to be --- a first cage part ---. For the purposes of the office action on the merits the limitations in claim 16 of:

- "least two fastening means provided on a cage part are generally arranged opposite each other on the cage part"

will be considered

- --- least two fastening means provided on the first cage part are generally arranged opposite each other on the first cage part ---

c. **Claim 20** has the same deficiencies identified for claim 16 and the limitations of:

- "a multi-piece cage comprising separable cage parts that allows inserting the resetting spring into the cage parts, the cage parts

comprise fastening means that lock the cage due to relative displacement of the cage parts, wherein each cage part includes fastening means provided in pairs and lying diametrically opposite each other”

will be considered

- --- a multi-part cage assembly comprising a plurality of separate cage parts that allows inserting the resetting spring into the plurality of separate cage parts, the plurality of separate cage parts comprise fastening means that lock the multi-part cage assembly due to relative displacement of the plurality of separate cage parts, wherein each cage part of the plurality of separate cage parts includes fastening means provided in pairs and lying diametrically opposite each other ---

d. **Claim 23** will be considered as follows to remain consistent with the suggest language for the limitations of claim 16. The specification of the instant invention discloses that each cage part, 17 and 18, includes a guiding portion 32. Therefore the limitations of:

- “least one cage part includes a separate guiding portion⁷ for radial centering and guiding of the at least one cage part with another cage part”

will be considered

- --- at least one of the first and second cage part includes a separate guiding portion for radial centering and guiding of the one of the first

and second cage part with the other of the first and second cage part -

--

e. **Claim 24** includes a similar deficiency as claim 19. The recitation of "a mating cage part" is unclear and appears to not to be commensurate in scope with the disclosure. The disclosure teaches two cage parts which could be interpreted as have a mating portion, section, or means. The limitations as presented would necessarily have to be construed as encompassing "one cage part," "another cage part," and "a mating cage part." Each of these elements would have to be considered as separate elements and this is not commensurate in scope with the specification. As best understood by the examiner, each of the first and second cage parts as interpreted above and corresponding to elements 17 and 18 of the disclosure could be considered to have a mating portion.

Pursuant to this determination the limitations of:

- "the guiding portion of the at least one cage part has a rounded or inclined conical configuration so that a mating cage part is automatically lead into a correct position during locking of the at least one cage part and the mating cage part"

will be considered as

- --- the guiding portion of the one of the first and second cage part has a rounded or inclined conical configuration so that a mating portion of the other of the first and second cage part is automatically lead into a correct position during locking of the one of the first and second cage

part and the mating portion of the other of the first and second cage part ---

f. **Claim 25** includes language that is unclear and ambiguous and which does not set forth clear structural relationships. Specifically the limitation of "a cage part has cylindrical wall with which the cage is accommodated in the carrier for forming modular unit" does not make a clear reference as what is the modular unit. As claimed this could either be the cage part that forms the cylindrical wall, the cage itself, the carrier, or the carrier and the cage. In addition the limitation essentially claims that a cage part is accommodated in the carrier, and therefore sets forth the carrier as being the "accommodating" component in the arrangement of the multi-part cage assembly and the carrier. This renders the limitation of "a carrier-side accommodating area of the cage part" as ambiguous because it suggest that the cage had a component that accommodates the carrier. As best understood by the examiner and consistent with the rejection of claim 25 under 35 U.S.C. 112 first paragraph above the limitations of:

- "a cylindrical wall with which the cage is accommodated in the carrier for forming a modular unit, and in that a carrier-side accommodating area of the cage part is provided independently of and spaced from the fastening means of the cage parts"

will be considered to be

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- --- one of a first and second cage part has a cylindrical wall forming a carrier-side engagement area with which the multi-part cage assembly is accommodated in the carrier, the multi-part cage assembly forming a modular unit, and wherein a carrier-side engaging area of the one of the first and second cage part is provided axially spaced from the fastening means of the plurality of separate cage parts ---

g. **Claim 26** includes allowable subject matter but includes the same deficiencies of claim 16 with respect to the lack of antecedent basis for "the cage" and "the cage parts," and the unclear and ambiguous limitations of "one of the cage parts" and "another of the cage parts." The limitations of:

- "A supply device for the supply of pressure fluid into at least one vehicle brake, comprising the following features: a piston is movably arranged in an accommodating member, a carrier bears a non-return valve arranged coaxially to the piston for the purpose of ventilating a working chamber into which the piston plunges, a resetting spring is arranged between the carrier and the piston, a multi-piece cage comprising separable cage parts for accommodating the resetting spring into the cage parts, the cage parts comprise fastening means that lock the cage due to relative displacement of the cage parts, the resetting spring is caged and simultaneously elastically preloaded under the relative displacement of the cage parts, a catch-type

engagement is provided for fastening the cage parts to one another, end said catch-type engagement comprising locking recesses being provided on at least one of the cage parts and a plurality of locking arms on the other cage parts, each locking arm being configured for engagement with a respective locking recess wherein the cage parts have a larger number of locking arms than locking recesses, and in that in a cage-part circumferential direction (U) a width (B) of the locking arms is considerably smaller than a width (b) of the locking recesses so that cage parts can be locked directly upon twisting the cage parts relative to each other in the cage-part circumferential direction (U)."

will be considered to be

- --- A supply device for the supply of pressure fluid into at least one vehicle brake, comprising the following features: a piston is movably arranged in an accommodating member, a carrier bears a non-return valve arranged coaxially to the piston for the purpose of ventilating a working chamber into which the piston plunges, a resetting spring is arranged between the carrier and the piston, a multi-part cage assembly comprising a plurality of separate cage parts for accommodating the resetting spring into the plurality of separate cage parts, the plurality of separate cage parts comprise fastening means

that lock the multi-part cage assembly due to relative displacement of the plurality of separate cage parts, the resetting spring is caged and simultaneously elastically preloaded under the relative displacement of the plurality of separate cage parts, a catch-type engagement is provided for fastening the plurality of separate cage parts to one another, end said catch-type engagement comprising locking recesses being provided on at least a first cage part and a plurality of locking arms on at least a second cage part, each locking arm of the first cage part being configured for engagement with a respective locking recess of the second cage part wherein the first cage part has a larger number of locking arms than the number of locking recesses of the second cage part, and in that in a cage-part circumferential direction (U) a width (B) of the locking arms of the first cage part is considerably smaller than a width (b) of the locking recesses of the second cage part so that the first and second cage parts can be locked directly upon twisting the plurality of separate cage parts relative to each other in the cage-part circumferential direction (U) ---

- h. **Claim 27** includes the limitation of "the cage part" and does not make it clear which of the "cage parts" of the claim 26 this is in reference to. Further the claim states that "the resetting spring is directly movable into abutment on a bottom of the cage part" and "the other end of the spring is movable into

abutment on a brim of the cage part.” Thus the limitations as claim effectively set forth the limitation that both ends of a spring are in contact with the same “cage part.” This is not possible and not commensurate in scope with the disclosure. As best understood by the examiner and consistent with the interpretation of claim 26 discussed above the limitations of:

- “the resetting spring is directly movable into abutment on a bottom of the cage part, and in that the other end of the resetting spring is movable into abutment on a brim of the cage part by way of a bowl-shaped spring retainer”
- --- the resetting spring is directly movable into abutment on a bottom one of the first and second cage part, wherein the other end of the resetting spring is movable into abutment on a brim of the other of the first and second cage part by way of a bowl-shaped spring retainer ---

i. **Claim 29**

- i Claim 27 recites the limitation "the cage parts" in lines 4, 5, and 6. There is insufficient antecedent basis for this limitation in the claim. As best understood “the cage parts” refers to the “two cage parts” presented in line 3. The examiner notes that this rejection is made to stress the importance of clear, concise, and consistent references to the same elements throughout the body of a claim for clarity.

- ii The limitation of "multi-piece" will be considered to be --- multi-part --- in order to remain consistent with the interpretation of the limitations in other claims.

j. **Claim 30** includes the same deficiencies of claims 16 and 26 with respect to the lack of antecedent basis for "the cage" and "the cage parts," and the unclear and ambiguous limitations of "one of the cage parts" and "another of the cage parts." The limitations of:

- "a multi-piece cage comprising separable cage parts for accommodating the resetting spring, wherein the resetting spring is caged and simultaneously elastically preloaded under relative displacement of the cage parts, and fastening means for locking the cage, said fastening means including at least two locking arms formed on one cage part and at least two holes formed on another cage part, each locking arm having a resiliently deformable and unconstrained end configured for engaging a hole of another cage part upon relative displacement of the cage parts"

will be considered to be

- --- a multi-part cage assembly comprising a plurality of separate cage parts for accommodating the resetting spring, wherein the resetting spring is caged and simultaneously elastically preloaded under relative displacement of the plurality of separate cage parts, and fastening means for locking the multi-part cage assembly, said fastening means

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including at least two locking arms formed a first cage part and at least two holes formed a second cage part, each locking arm having a resiliently deformable and unconstrained end configured for engaging a hole of the second cage part upon relative displacement of the plurality of separate cage parts ---

8. Claims 21 and 22 rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: the recitation of “a cage part” does not refer to any previously claimed components in the claims from which claims 21 and 22 depend. The examiner attempted to interpret the limitations of the claims to mean that “opposing fastening means each cage part are the same” but this is not commensurate in scope with the disclosure since the fastening means for element 17 are not the same as the fastening means (or the component of a first cage part that forms a fastening means with a component of a second cage part) for element 18. As such the examiner is precluded from examining claims 21 and 22 for lack of clarity since one of ordinary skill in the art would be unable to ascertain what the components that are essential to forming a fastening means are, and where the components are disposed on the elements which they fasten together.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 20 and 29 is rejected under 35 U.S.C. 102(b) as being anticipated by Hinz et al. WO 01/70550. Hinz teaches all the limitations as claimed for a method of assembling a supply device including the steps of inserting a resetting spring 4 between two cage parts (36, 63) of a multi-part cage assembly (4, 5, 36, 37, 63) displacing the two cage parts (36, 63) in relation to each other thereby compressing and elastically preloading the resetting spring 4 between the two cage parts (36, 63), radially aliening fastening means of the two cage parts (36, 63) together during the displacing step, via the rounded inner rim of element 36 receiving the rounded axial protrusion of element 63, and engaging the fastening means of the two cage parts (36, 63) to lock the two cage parts (36, 63) together, as shown in figure 12.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

13. Claims 16, 19-20, 23-25, and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hinz et al. WO 01/70550 in view of Schuller et al. US 6,361,295. Hinz teaches all the limitations as claimed for a supply device including: **[claim 16]** a piston 3 is movably arranged in an accommodating member 1, a carrier 9 bears a non-return valve 11 arranged coaxially to the piston 3 for the purpose of ventilating a working chamber 40 into which the piston 3 plunges, a resetting spring 4 is arranged between the carrier 9 and the piston 3, wherein a multi-part cage assembly (4, 5, 36, 37, 63) comprising a plurality of separate cage parts (36, 63), the resetting spring 4, the plurality of separate cage parts (36, 63) comprise fastening means (press fit engagement between elements 36 and 63 in region surrounding element 4 where it abuts element 63, that lock the multi-part cage assembly (4, 5, 36, 37, 63) and the resetting spring 4 is caged and simultaneously elastically preloaded under the relative displacement of the plurality of separate cage parts (36, 63), said fastening means (press fit engagement between 36 and 63); a first 36 and second 63 cage part; **[claim 23]** wherein at least one of the first 36 and second 63 cage part includes a separate guiding portion, inner rim of the element 36 receiving element 63 and outer curved axially extending protrusion on an outer circumference of element 63, for radial centering and guiding of the one of the first 36 and second 63 cage part with the other of the first 36 and second 63 cage part; **[claim 24]** a guiding portion of the one of the first 36 and second 63 cage part has a rounded or inclined conical configuration, as defined by the rounded inner rim of element 36 receiving the rounded axial protrusion of element 63, so that a mating

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portion (rounded axial protrusion of element 63) of the other of the first 36 and second 63 cage part is automatically lead into a correct position during locking of the one of the first 36 and second 63 cage part and the mating portion (rounded axial protrusion of element 63) of the other of the first 36 and second 63 cage part.

Further Hinz teaches a supply device including **[claim 20]** a piston 3 is movably arranged in an accommodating member 1, a carrier 9 bears a non-return valve 12 arranged coaxially to the piston 3 for the purpose of ventilating a working chamber 40 into which the piston 3 plunges, a resetting spring 4 is arranged between the carrier 9 and the piston 3, a multi-part cage assembly (4, 5, 36, 37, 63) comprising a plurality of separate cage parts (36, 63) that allows inserting the resetting spring 4 into the plurality of separate cage parts (36, 63), the plurality of separate cage parts (36, 63) comprise fastening means, as defined by the rounded inner rim of element 36 receiving the rounded axial protrusion of element 63, that lock the multi-part cage assembly (4, 5, 36, 37, 63) due to relative displacement of the plurality of separate cage parts (36, 63), wherein each cage part (36 and 63) of the plurality of separate cage parts (36, 63) includes fastening means

Further Hinz teaches a supply device including **[claim 30]** a piston 3 movably arranged in an accommodating member 1, a working chamber 40 into which the piston 3 plunges, a resetting spring 4 positioned within the working chamber 40 for biasing the piston 3, a multi-part cage assembly (4, 5, 36, 37, 63) comprising a plurality of separate cage parts (36, 63) for accommodating the resetting spring 4, wherein the resetting spring 4 is caged and simultaneously elastically preloaded under relative displacement

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of the plurality of separate cage parts (36, 63), and fastening means for locking the multi-part cage assembly, said fastening means, as defined by the rounded inner rim of element 36 receiving the rounded axial protrusion of element 63, s formed a first cage part 36 and a second cage part 63.

Hinz fails to teach the limitations for a supply device that are taught by Schuller for a supply device including a carrier 68 and a cage assembly 54 including: **[claims 16 and 30]** as least two components forming an assembly, elements 64 and 68, associated with the cage assembly 54, as element 64 houses assembly 54 and element 68 is proximately located near element 54 by connection with element 64, are fastened together where in a first component 68 has locking arms 80 that fit into fastening means of a second component 64 including recesses or holes 72 for receiving the locking arms 80 of the first component; **[claims 19 and 20]** each of a first and second component (64, 68), includes fastening means (72 and 80 respectively) that are provided in pairs and lying diametrically opposite each other, as exemplified in figure 2 with respect to element 80 of element 68. Schuller teaches a fastening mechanism by way of detent connection between a carrier and a closure for a supply device. Schuller teaches that the fastening means has the advantage that it can be done and undone by simple means and components of the supply device no longer have to be crimped together. A modification to Hinz in which a detent connection was formed on one of elements 36 or 63, and engaging arms were formed on opposite component where detent was not made, would provide a reliable connection between components that did not require the use of a separate tool but also facilitated disassembly. It would have been obvious to

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one having ordinary skill in the art the time the invention was made to modify a connection between components of a cage assembly that receives a piston in a supply device, as taught by Hinz, to have a detent connection, as taught by Schuller, in order to provide an easy means for assembly and disassembly that did not require the use of a tool such as a crimping tool (Schuller - col. 1 ll. 51-57).

Allowable Subject Matter

14. Claim 25 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 1st and 2nd paragraph, and in independent form including all of the limitations of the base claim 16. The limitations of claim 16 also being required to be re-written to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph before incorporation.

15. Claim 26 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action. The draft of claim 26, drafted by the examiner in item 7.g of this action, is considered to distinguish patentably over the art of record in this application.

a. Claim 27 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim 26. The limitations of claim 26 being required to be re-written to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph before incorporation.

b. Claim 28 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten to overcome the rejection(s) under 35

U.S.C. 112, 2nd paragraph, and in independent form including all of the limitations of the base claim 26. The limitations of claim 26 also being required to be re-written to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph before incorporation.

Response to Arguments

2. Applicant's arguments with respect to claims 16 and 19-30 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEONARD J. WEINSTEIN whose telephone number is

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(571)272-9961. The examiner can normally be reached on Monday - Thursday 7:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on (571) 272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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